Brokerage in commercialised healthcare systems: a conceptual framework and empirical evidence from Uttar Pradesh

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Abstract

In many contexts there are a range of individuals and organisations offering healthcare services that differ widely in cost, quality and outcomes. This complexity is exacerbated by processes of healthcare commercialisation. Yet reliable information on healthcare provision is often limited, and progress to and through the healthcare system may depend on knowledge drawn from prior experiences, social networks and the providers themselves. It is in these contexts that healthcare brokerage emerges and third-party actors facilitate access to healthcare.

This article presents a novel framework for studying brokerage of access to healthcare, and empirical evidence on healthcare brokerage in urban slums in Lucknow, Uttar Pradesh. The framework comprises six areas of interest that have been derived from sociological and political science literature on brokerage. A framework approach was used to group observational and interview data into six framework charts (one for each area of interest) to facilitate close thematic analysis.

A cadre of women in Lucknow's urban slums performed healthcare brokerage by encouraging use of particular healthcare services, organising travel, and mediating communications and fee negotiations with providers. The women emphasised their personal role in facilitating access to care and encouraged dependency on their services by withholding information from users. They received commission payments from healthcare programmes, and sometimes from users and hospitals as well, but were blamed for issues beyond their control. Disruption to their ability to facilitate low-cost healthcare meant some women lost their positions as brokers, while others adapted by leveraging old and new relationships with hospital managers.

Brokerage analysis reveals how people capitalise on the complexity of healthcare systems by positioning themselves as intermediaries. Commercialised healthcare systems offer a fertile environment for such behaviours, which can undermine attainment of healthcare entitlements and exacerbate inequities in healthcare access.

Keywords

India; health system; brokerage; voucher; healthcare

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Introduction

People seeking access to healthcare often have to negotiate a complex and opaque landscape of service provision in which it is difficult to find reliable information on the cost and quality of healthcare and its alternatives, as well as its necessity and outcomes (Arrow, 1963; Gabe et al., 2015). There are informational, social, financial and other practical barriers that prevent people from 'appearing' at places of care, and the people who do reach places of care then face assessment on whether care should be offered or sought elsewhere (Dixon-Woods et al., 2006). It is a situation that has been aptly described as navigating a 'healthcare maze' (Collyer et al., 2015).

This article focuses on the phenomenon of healthcare brokerage: intermediation of access to healthcare by 'third-party' actors who are external to healthcare providers and the immediate families of prospective users. The concept of brokerage has broad applicability in the healthcare sector yet its use has largely been limited to that of a descriptor for studying transnational healthcare arrangements, where companies and travel agents are described as brokering arrangements for 'medical tourists' (Deepa et al., 2013; Snyder et al., 2011). Other authors have used brokerage to describe knowledge transfer (Long et al., 2013), and the pressures of life at the interface between value systems in health, such as the nurse-led 'culture brokerage' between biomedicine and communities (Barbee, 1987; Jezewski, 1990), and community worker brokerage between governments and communities (Nading, 2013). A related body of work uses Michael Lipsky's (1980) concept of 'street-level bureaucrats' to analyse the motivations and pressures for workers at the frontline of healthcare systems (Erasmus, 2014).

This paper presents a novel framework for analysis of healthcare brokerage, and empirical evidence on healthcare brokerage in urban slums in Lucknow, Uttar Pradesh. The first section of this paper highlights healthcare commercialisation as an enabling factor for emergence of brokerage in the healthcare sector. Section two discusses insights that can be drawn from sociological and political science literature on brokerage, and identifies six areas of interest that provide particular insights into the phenomenon of healthcare brokerage and offer a framework for brokerage analysis. Section three introduces empirical research conducted in Lucknow, Uttar Pradesh, by outlining the setting and the methods used to generate and analyse data. The fourth section is structured using the six areas of interest for brokerage analysis and presents original findings on the strategies, rewards and pressures associated with healthcare brokerage. The paper concludes with discussion on the implications of brokerage for our understanding of healthcare and its provision, and suggests possible future applications of a brokerage framework in the study of healthcare.

Brokerage and healthcare commercialisation

Brokerage is a well-recognised phenomenon in economic literature, in which it is frequently analysed as a form of agency in which a 'principal' tasks an 'agent' to act on their behalf (Myerson, 1982; Sappington, 1991). The term is commonly used to describe intermediating actors in marketplaces, and professional 'broker' firms thrive in service sectors characterised by complex systems of information and unpredictable changes, for example finance (Frye, 2000), insurance (Karaca-Mandic et al., 2013), and real estate (Searle, 2014). The companies match clients with one

another, facilitate purchases and arrange exchanges, and in return receive fees or commissions based on the size of transaction.

The healthcare sector shares the characteristic complexity and uncertainty of other service sectors in which brokerage behaviours arise. There is detailed information on health issues, medical conditions and treatments (Gabe et al., 2015); substantial difficulties for obtaining reliable information on predicated healthcare costs (Arrow, 1963) and quality of care (Hanefeld et al., 2017), and an array of organisations and actors involved in the processes of providing care. Progress through this 'healthcare maze' requires significant personal resources and some prospective healthcare users can draw on their prior healthcare experiences and on information from online sources and social networks, however many people lack the necessary resources, particularly those people who are from poor and other socially excluded groups (Willis et al., 2016). The need for support when accessing care has been recognised in some healthcare systems by the inclusion of 'gatekeeper' roles for health professionals to guide healthcare users and their decision-making, although gatekeepers are also able to perform exclusionary (Collyer et al., 2017) and abusive practices (Nandraj, 2015).

Healthcare commercialisation processes exacerbate complexity in healthcare systems. These processes involve the expansion of healthcare markets and increased emphasis on models of provision involving cash income and private profit (Mackintosh and Koivusalo, 2005). Commercialisation has led to growing pluralism of public and private services in many healthcare systems (Bloom et al., 2013; Bloom and Standing, 2001). It undermines attainment of healthcare entitlements as prospective users are expected to perform roles as consumers of healthcare, exercising rational choice in a marketplace of providers (Tritter et al., 2011). While there is some evidence to indicate that socially and economically privileged groups in high-income settings are able to effectively exercise choice of healthcare provider (Willis et al., 2016), for other groups user 'choice' is a more restricted concept (Gabe et al., 2015). Brokers offer a way to navigate the complex landscape of varying providers, services, costs and quality in order to attain healthcare entitlements.

Social science approaches to studying brokerage

There is extensive sociological and political science literature on brokerage behaviours and this body of work can inform the study of brokerage in the healthcare sector, where similar detailed examination of individual agency amongst brokers is lacking. Six key areas from sociological and political science literature are highlighted in turn below: the nature of brokerage activities; social relations between brokers and other groups; benefits to each group participating in brokerage; attempts by brokers to consolidate their position; personal costs of engaging in brokerage activities; and ways in which brokers react to changes in their context.

The nature of brokerage activities

Sociological analyses of networks have used varying interpretations of brokerage, ranging from the arrangement of 'transactions' (Marsden, 1982) to the influencing of 'interactions' more broadly (Obstfeld et al., 2014). They include catalytic *tertius iungens* behaviours that promote closer interaction between actors, and 'middle-man' *tertius gaudens* arrangements that facilitate exchange while maintaining existing divisions (Obstfeld, 2005). Studies of political brokerage pay particular attention to the nature of brokerage activities in systems of patronage and clientelism (Lemarchand

and Legg, 1972). Political 'fixers' – usually politicians or activists working on their behalf – control access to certain resources, which can then be leveraged in return for payments and votes. In many cases the resources themselves are publicly owned, for example subsidised food or electricity (Harriss-White, 2003; Jha et al., 2007), but are characterised by the presence of opaque eligibility criteria, convoluted administrative processes, over-burdened service providers and corrupt officials (Auyero, 2012).

Social relations between brokers and other groups

Brokerage behaviours develop amongst groups characterised by local cohesion (strong within-group ties) and wider fragmentation (absent or weak between-group ties) (Burt, 1992; Granovetter, 1973), but also within groups with strong ties where there remains scope for new forms of collaboration (Obstfeld, 2005). The extent to which third-party actors can intermediate is determined by the strength of their relationships with the other actors (Gould and Fernandez, 1989), and so they foster good relationships with potential clients and may downplay certain relationships to avoid perceptions of bias towards one group or another (Stovel and Shaw, 2012). The brokers may operate alone, or may work as part of wider 'problem-solving networks' comprising a range of actors with varying strengths of ties and varying degrees of control over resources (Auyero, 2000).

Benefits to each group that participates in brokerage

In network analyses of brokerage, significant attention has been devoted to the personal benefits generated by intermediaries through brokerage activities, such as the commission payments they earn from facilitating transactions (Marsden, 1982). For political brokers, such benefits may extend beyond income to include votes and other forms of political support (Lemarchand and Legg, 1972), while brokerage of information within organisations may enable an intermediary to improve their professional reputation and accelerate career progression (Burt, 2004). There are wider potential benefits for engaging in brokerage as persons with knowledge of administrative and management procedures help prospective service users to negotiate bureaucracies (Corbridge et al., 2005; Harriss-White, 2003), even assisting service users in bypassing administrative systems or negotiating a reduction in fees. Meanwhile brokerage of information within organisations can improve communication and facilitate innovation (Burt, 2004).

Attempts by brokers to consolidate their position

The presence of alternative mechanisms through which actors can interact – either directly or through other intermediaries – weakens the negotiating power of a broker, while fewer alternatives to brokerage will strengthen the opportunities for brokers to promote personal benefits (Marsden, 1982). Brokers may therefore seek to consolidate and protect their intermediary positions in order to preserve their personal benefits. Having used existing contacts and knowledge to develop a monopoly on access to information (Stovel and Shaw, 2012), brokers may then ostracise rivals and non-supporters to delegitimise criticism (Lieten, 1996). They deliberately withhold certain information from clients and potential rivals in order to protect their privileged position (Auyero, 2000); a *tertius gaudens* orientation that sees brokers maintaining and promoting division between the actors seeking exchange (Wolff, 2011). Brokers may promote integration, or breed 'exploitation, the pursuit of personal profit, corruption, and the accumulation of power' (Stovel and Shaw, 2012, p. 140).

Personal costs of engaging in brokerage

There are significant personal costs and reputational risks as a result of engaging in brokerage. The time and energy invested in performing brokerage may be significant and yet may not be adequately rewarded if a transaction fails to materialise, or an election is lost (Koster, 2012). By positioning themselves as a trusted agent for their clients, a broker becomes a target for criticism and political dissatisfaction in case of any problems (Bailey, 1969). This extends to accusations of prioritising self-interests or of being 'captured' by the interests of one group (Stovel and Shaw, 2012). Such pressures are exacerbated in contexts where rival brokers operate and seek to consolidate their intermediary position by criticising and ostracising rivals (Lieten, 1996).

Ways in which brokers react to a change in context

The vulnerability and precarity of intermediary positions is exacerbated by the constant risk of change in the wider context. Loss of access to resources is a key concern, for example due to a breakdown in social relationships or an election loss. Some political brokers have responded to a party election loss by defecting to a new ruling party in order to preserve their access to public resources (De Wit and Berner, 2009). Yet there are also opportunities for other forms of brokerage that emerge due to contextual changes. Intermediaries can position themselves and their brokerage services within new social programmes (Auyero, 2000), or in the new markets that emerge following privatisation of public assets (Simon, 2009). It is in this area of activity that we can see how healthcare commercialisation creates opportunities for brokerage.

Methods

Study setting

The data used in this paper were generated and collected in Lucknow, in the Indian state of Uttar Pradesh, as part of a doctoral study on the design and enactment of a voucher and contracting programme for maternal and reproductive health: the Sambhav scheme. The programme was funded by the US Agency for International Development and the Indian federal government and ran between 2007 and 2013 in the states of Uttar Pradesh and Uttarakhand. Its designers aimed to increase uptake of maternal and reproductive healthcare by distributing vouchers that families could exchange for free services at accredited private hospitals, which would in turn be reimbursed by the programme (IFPS Technical Assistance Project, 2012). When the programme ended in 2013, 30,000 maternal and reproductive health vouchers had been used in Lucknow, including more than 14,000 antenatal care vouchers, 2,000 vouchers for care during childbirth and 3,000 postnatal care vouchers.

Uttar Pradesh and Uttarakhand have some of the highest maternal mortality rates in India, and have commercialised healthcare systems dominated by user fees and an extensive private sector, particularly in urban areas. In these states the Sambhav scheme was launched shortly after the government's Janani Suraksha Yojana (Safe Motherhood Programme), which offers 1,000 or 1,400 rupees to a woman if she gives birth in an urban or rural government hospital, respectively. Pregnant women in Lucknow's urban slums ostensibly had a choice between free government care plus a Janani Suraksha Yojana payment of 1,000 rupees, free private healthcare using the Sambhav scheme, or fee-paying private healthcare ranging from a few hundred rupees for a traditional birth attendant to several thousand rupees for care in a private hospital. Yet in practice they had limited

resources with which to inform decision-making in an exclusionary and often abusive healthcare system in which entitlements and even basic rights are frequently withheld (Coffey, 2014; Nandraj, 2015; Sudhinaraset et al., 2016).

The Sambhav scheme included a cadre of women 'community health volunteers' (CHV) who functioned as healthcare brokers. They were recruited by programme managers from within/near slum areas to raise awareness of the programme and family planning in communities, distribute vouchers, and accompany women to participating private hospitals. The age and education of CHVs varied widely, some were mothers with young children, while others were grandmothers; some were educated to secondary school level, others to master's degree level. Their main household income came from their husbands' work as craftsmen, running tea stalls and transporting materials, but the Sambhav scheme provided an important source of additional income.

These CHVs were to receive commission payments from the Sambhav scheme, ranging from 5-50 rupees per voucher submitted by someone from their local area, as well as regular monthly payments of 50 rupees to cover transport costs and 200 rupees to maintain programme registers. A submitted voucher had the name of the hospital, service user and CHV to aid tracking and prevent multiple uses. A group of 15 'assistant voucher coordinators' (henceforth 'supervisors') were each responsible for overseeing the activities of 15-20 CHVs, and were in turn monitored by programme managers based in the District Innovations in Family Planning Services Agency (DIFPSA) and the State Innovations in Family Planning Services Agency (SIFPSA).

The CHVs were given vouchers to distribute in an allocated area and perceived their facilitation of access to healthcare as a service in itself. They effectively controlled access to free maternal and reproductive healthcare at one of the accredited private hospitals, of which there were 17 in Lucknow when programme implementation was at its peak in 2012/13. The 'output-based' system of commission payments to CHVs according to voucher usage was designed to incentivise voucher distribution and usage (IFPS Technical Assistance Project, 2012), and represented a commercialised approach to facilitating healthcare access in which emphasis was placed on performing activities in return for commission cash payments. This commercialised approach to brokering healthcare persisted even after the Sambhav scheme ended, as discussed later in the findings.

Data collection and the brokerage framework analysis

Ethics approval was obtained prior to commencement of the research (King's College London application reference PNM/12/13-97 and Jawaharlal Nehru University Centre for Social Medicine and Community Health). Data were collected during three visits to Lucknow in 2013 and 2014. The author recorded observations as field notes and conducted 59 interviews with 41 people who were selected purposively based on type of involvement with the Sambhav scheme: programme managers, hospital owners and clinicians, CHVs and their supervisors, and voucher users. Data collection focused on two areas of the city where programme managers reported the Sambhav scheme to be functioning well, and respondents were contacted by the author or a research assistant, either by phone or in person while at home or at work, in order to request an interview at a time and place of their choice. Potential respondents were told about the aims of the research and asked if they would like to participate and to complete a consent form. They were asked if the interview could be audio-recorded and were instructed that they could withdraw from participation

at any time up until 1st April 2016. Pseudonyms are used throughout this paper. A research assistant who was fluent in English, Hindi and Urdu provided interpretation and translation services, and emergent findings were discussed with researchers based in India and the UK. Respondents were contacted during subsequent visits to Lucknow to arrange follow-up interviews.

A framework analysis approach, based on the six areas of interest for healthcare brokerage analysis identified in the previous section, was used by the author to interrogate data from field notes and interviews. The process of analysis involved five steps: familiarisation, identification of a thematic framework, indexing, charting and interpretation (Pope et al., 2000). Rather than starting with open reading and coding for themes, a framework analysis focuses on specific issues using a pre-determined set of questions. In the research reported in this paper, six framework charts were created, one for each of the six areas of interest: the nature of brokerage activities; social relations; benefits to each group; consolidation activities; personal costs; and changes in context. Within each framework chart, data from field notes and interviews were grouped into columns based on pre-determined categories. Within each column a thematic analysis was performed to allocate descriptive codes summarising an action, behaviour, attitude or assumption. Additional columns were added to the framework charts if a new category was identified. The findings are presented below according to the six areas of interest and their corresponding charts.

Findings

The nature of brokerage activities

Healthcare brokers can encourage use of specific healthcare services by reducing psychological barriers such as unfamiliarity, mistrust and even fear of providers. To this end CHVs in Lucknow provided information and assurances on the options available, boasted personal connections and offered chaperone services. They visited homes in their area to ask about the health of the women living there, invited women to come with them to hospital for maternal and reproductive healthcare services, and explained the benefits of skilled healthcare.

Women who were potential service users seemed particularly concerned with the cost and quality of care, and their expectations were shaped in turn by the CHVs, who reported that their own persistence – to "motivate" or "convince" families – was important in overcoming mistrust. Families were told the likely costs of services at a hospital and this ensured that they would bring some money to pay and could not complain about unforeseen costs. While working in the Sambhav scheme, Shanaya told women that their care would be free but that they would have to pay for medicines and an HIV test (that was mandatory at Malhotra Hospital but not included in the voucher scheme), and Priya explained to women that they would need to pay for blood and urine tests. Personal assurances were used to convince women that they would receive good quality of care at a low cost. This was an important method for reducing mistrust of providers, and CHVs emphasised their personal role in securing such benefits:

> "if we meet a woman and she is in the third or fourth month [of pregnancy] then we tell her, we motivate her: 'sister, our project provides free delivery in Malhotra Hospital, we will help you to get free services. We have a voucher from Sambhav that is run by SIFPSA and I will give it to you'." (Prisha, CHV)

Brokerage services included accompanying a woman to healthcare services during pregnancy and childbirth, ostensibly to ensure that she was treated well, and these activities emphasised the personal role of the CHV in accessing healthcare services. The CHVs were obliged to accompany a Sambhav voucher user during childbirth, but Anita, Prisha and Jyoti offered a wider package of services accompanying a woman for antenatal care, during labour and childbirth, and for postnatal care in return for additional payments from the families of users. Other CHVs accompanied women during antenatal care for strategic reasons that are discussed later, and the CHVs were also responsible for organising onward transport when a voucher hospital refused to provide care to a voucher user, usually because the hospital manager expected the cost of care to be higher than the value of the voucher reimbursement made to the hospital.

The CHVs also offered to negotiate discounts for specific user fees at certain hospitals, and Jyoti described an example of how she helped a woman obtain discounted care at Malhotra Hospital:

> "There was a delivery case nearby and at Malhotra Hospital they said that the woman had to pay 4,500 rupees […] I asked the woman, first of all tell me whether you trust me or not. She didn't say anything. Then I told her that the voucher scheme had stopped, but she didn't believe me and said that I must do something for her. Then I talked to one of the doctors and said that since the woman to give birth is poor and won't be able to give much then let us give her a discount and allow her to pay 3,000 rupees. Then she had to pay only 3,000 rupees." (Jyoti, CHV)

Social relations of brokers

The personalised nature of healthcare brokerage relies on maintaining personal connections and a positive reputation as someone who can be trusted. This is facilitated by a background of existing relationships and brokerage activities, and CHVs in Lucknow drew on experience and reputations generated through previously or concurrently held community positions in other donor-funded programmes such as Hindustan Latex Family Planning Promotion Trust's (HLFPPT) Merrygold franchise network, or the Bill and Melinda Gates Foundation's Urban Health Initiative. Some CHVs had long-standing experience in facilitating access to healthcare, for example Anita had been accompanying women to a nearby hospital for 20 years. Another had previously distributed ration cards for government-subsidised fuel and food.

Importantly, a healthcare broker must avoid being seen as untowardly biased towards one group or another, or risk losing their impartial status. One method is to maintain a public image of benevolence. CHV Aditi would give nutritional advice to women and would give sweets to their children in order to strengthen her relationship with families, while Anita explained that she was trusted by families because of the sacrifices she made to assist them:

> "When the child is born I stay during the night, I accompany them, that's why they trust me. If somebody calls me at 1am and comes to my home, I go with them. They can go anywhere they want, whether it is a hospital or whatever. I don't take money from them, I go there for service because we live in a village-like environment." (Anita, CHV)

CHVs played down payments that they received from the Sambhav scheme in order to avoid accusations of bias. Priya and Prisha told women in Lucknow that they did not receive commissions for their "social work", even though they did in fact receive payment, and an exchange with them provides a revealing example of the assumptions among local women about the income they might be receiving:

> Aditi: "I get nothing and they say to me 'oh sister you are getting money.' What are we getting? Whether we are getting something or not, you should come to the hospital. You should be happy and healthy. We have to do it like this to make them visit the hospital."
> Priya: "The women say 'give your introduction' and they start asking about us. They say 'sister, you must be getting a lot of money, you must be getting commission."
> Aditi: "Like this they talk to us. You will not take us seriously but the women think that we are getting 3,000-4,000 rupees. And they say 'you get something'. They talk to us like that."
> Priya: "And we tell them that we are doing social work, we are not getting money."
> Aditi: "Her mother-in-law will say to us 'go from here, nobody does social work, nobody can be trusted. This is government, nobody can be trusted.' Like this they talk to us and they just shoo us away." (Priya and Prisha, CHVs)

Families who disagreed or quarrelled with CHVs were portrayed by them as ignorant. Aditi described some women she had encountered as "*beehad*", a term sometimes used as an insult by insinuating that someone is from the neighbouring state of Bihar, which is regarded as less developed by some in Uttar Pradesh. The women had refused to accept assistance from Aditi. Such behaviours represent an attempt to discredit critical voices in order to maintain the reputation of benevolence and trustworthiness.

Benefits of brokerage

Healthcare providers benefit from brokerage activities through increased throughput of users while those users stand to benefit from access to healthcare services that might be otherwise unavailable. In the example of negotiated fees described previously, Jyoti's claim to have spoken directly to a doctor at Malhotra Hospital in order to arrange reduced fees can be interpreted as evidence of her providing helpful assistance to a family who had limited confidence or power to negotiate with a hospital manager or obstetrician. That family benefitted from a 33% reduction in fees, when they might otherwise have to pay the full 4,500 rupees by selling possessions or borrowing money, while Malhotra Hospital benefited from the 3,000 rupees that the family eventually paid. The perceived commercial value for providers in Lucknow is indicated by the value of commissions that they paid to former CHVs after the Sambhav scheme ended, which were up to 600 rupees for accompanying a woman during childbirth. In one case, former CHV supervisor Kabir was hired as a 'Public Relations Officer' by Sri Krishna Hospital in order to encourage his network of former CHVs to continue bringing healthcare users to the hospital.

Individuals and organisations that act as healthcare brokers can generate significant financial rewards from their activities, particularly if they have a near-monopoly on access to certain services and information. In Lucknow, CHVs in the Sambhav scheme received 50 rupees for accompanying a woman for care during childbirth, and occasionally received gifts from participating hospitals such as bags and cups. In addition to programme payments and hospital gifts, some received commission

payments from hospitals and families. The doctor at Malhotra Hospital openly acknowledged making payments to CHVs in addition to the money they received from the Sambhav scheme. As noted above, after the programme ended hospital managers paid the programme's former CHVs up to 600 rupees for bringing a pregnant woman for childbirth.

Brokers based in communities can benefit in subtler ways, through their enhanced knowledge and local reputation. By developing a reputation as an experienced CHV, a broker can attract roles in future community projects. For example, Priya was an obvious candidate to be a CHV in the Sambhav scheme as she already operated as a peer educator in the Urban Health Initiative. Anita was able to use her existing reputation (as someone who accompanied women to hospital) to secure positions in the Sambhav scheme and the Merrygold franchise.

Consolidation of the brokerage position

The mediating position of healthcare broker is predicated on a lack of familiarity between users and providers, and a lack of appealing alternatives to brokerage services. In order to maintain that scenario, and consolidate their position, a broker can discredit alternative routes for seeking healthcare, restrict awareness in communities of the different healthcare providers and services available, and encourage their personal mediation of communications between users and specific providers.

In Lucknow, it was widely acknowledged among Sambhav scheme staff that many women used the vouchers for antenatal care but then went to a government hospital to give birth in order to receive 1,000 rupees through the Janani Suraksha Yojana. This practice meant CHVs missed out on their payment of 50 rupees for submission of a childbirth voucher, and some tried to discourage women from using government hospitals by making claims of better quality of care in the private hospitals for which they acted as an intermediary. As one explained:

> "They say that the medicines are free of cost in the government hospitals but we explain to them that […] although you have to pay a little bit for your medicines [in the Sambhav scheme], everything else is covered under this voucher. Please give up the temptation of 1,000 rupees, what really matters is your health." (Jyoti, CHV)

In such cases, families who chose to use the CHV's brokerage services were provided with limited knowledge to ensure the necessity of mediation. In some interviews, women voucher users appeared to have no idea that they had participated in the voucher programme. CHVs explained that they did not physically give vouchers to women. Ostensibly this was in case the voucher was lost or damaged, but it also allowed the CHVs to exaggerate the nature of their personal influence and in doing so create dependence. Rather than describe features and entitlements for the Sambhav scheme to its potential users, some stated simply that they were part of a programme for poor women to get free treatment at a nearby private hospital.

CHVs mediated communications between users and providers on the basis that it reduces misunderstanding and facilitates healthcare provision, and Jyoti's (one of the CHVs) claim earlier in this paper to have negotiated on behalf of users is an example of this. However this practice also reinforces the notion that it was their personal relationships and presence that produced the desired

access. As Jyoti noted, “the women keep on saying ‘since you have a good relationship with all the staff at the hospital, it is better if you take us to Malhotra’.” In this way brokers maintain a barrier of unfamiliarity and mistrust between the two groups to ensure continued demand for their services.

By limiting awareness of programme entitlements, brokers prioritise their personal interests. In the Sambhav scheme, CHVs could limit choice of provider to their preferred hospital, which was often the nearest as that meant they (as well as voucher users) incurred lesser travel costs. As noted previously, some exploited their position of privileged access to healthcare by encouraging informal commission payments from hospitals and voucher users. The manager at one hospital had discovered that CHVs and hospital workers had also been collecting informal payments of up to 2,000 rupees from voucher users. These incidents can in part be explained by programme designs that give control of a desirable and normally unattainable ‘commodity’ to people who themselves are poor and financially insecure.

Financial and social pressures faced by brokers

Although potentially lucrative, healthcare brokerage is accompanied by a series of pressures and risks that stem from the positions of individual brokers within their families and communities. CHVs in Lucknow faced up-front costs in order to perform brokerage activities which were particularly problematic as they themselves lived in low-income households. The cost of their transport when accompanying women to and from hospital was a particular burden as CHVs in the Sambhav scheme were eligible for just 50 rupees per month to cover all their transport, enough to cover one or two rickshaw journeys. They preferred to walk to and from the hospital with voucher users whenever possible, sometimes walking together as a group along the side of the road, and reported that they occasionally faced resistance from families who assumed they were given money for transport for each voucher user.

There are also opportunity costs for the time spent away from other forms of work. In Lucknow the families of CHVs were supportive of the brokerage activities if it brought money into the household but became unsupportive (and even obstructive) if the work was not felt to be of value to them. CHVs cited instances of facing resistance from their family and one CHV described being “scolded” by her husband because she wanted to accompany a woman to hospital at night. Such problems in turn impacted on relationships between CHVs and their supervisors. Deepak described the difficulty he faced as a field supervisor with the husbands of CHVs:

> “it has become a battle with their husbands. Their husbands quarrel a lot. The husbands say ‘no, no, they won’t work […] I don’t understand the work, at midnight she picks up the call and rushes. What kind of work is this? They work day and night. At the end the result is what? Nothing.” (Deepak, supervisor)

An emphasis on personal services by brokers makes them a target for criticism when healthcare provision does not match expectations. In Lucknow, CHVs were held personally responsible for the actions of hospitals, over which they had little or no control, and one CHV described an incident in which she was blamed by a family because they were charged for care:

> "The woman was pregnant and we went there and asked her to come with us to the hospital as we would ensure that no charges are taken from poor people, only the medicines you have to buy […] She had swelling in her legs so the doctor charged her 150 [rupees], instead of 300 [the 'full' price]. Her family were blaming us, saying that they were unfairly charged 150, as we had earlier said it was free […] she said that 'you people are all liars and making us look like fools'." (Shanaya, CHV)

Similarly, when implementation of the Sambhav scheme was interrupted in late-March 2013, CHVs lost their ability to offer low-cost care at private hospitals and bore the brunt of their communities' frustration. CHVs were faced with accusations that they were withholding help, and Priya described an incident in which she was approached by a group of women from her area who demanded to know why they could no longer get free care at the Reddy Hospital. Prisha described the frustration of women who wanted care at Malhotra Hospital, and how she was blamed by them:

> "Everywhere in the field there is chaos about the vouchers […] They are saying we have stopped it for money […] the women are saying that we are hiding vouchers […] a patient asked me for a voucher and I told her 'where I will get the voucher from?' […] They say 'you people tricked us, you told lies'." (Prisha, CHV)

Responses to changing contexts

Healthcare brokers work within healthcare systems that are constantly shifting as the range of information, choices, and costs change, while new relationships and even brokers emerge. In this dynamic context, healthcare brokers face a constant threat of losing the privileged access that they hope to offer to prospective healthcare users, and respond by abandoning or adapting the services they perform. The closure of the Sambhav scheme in early July 2013 meant that CHVs lost their ability to offer low-cost care at private hospitals and needed families to be willing and able to pay higher fees at those private hospitals. That was particularly problematic for CHVs who operated in the poorest communities, where families were unable to afford the fees of private healthcare. The availability of free government healthcare services (plus the cash incentive of 1,000 rupees through Janani Suraksha Yojana) as an alternative to paid care in private hospitals was an important influence on family decision-making. As Lakshmi, a broker who operated in an impoverished community, noted:

> "My field is ruined. Who will trust me now? Women trusted me and they used to visit the hospitals. The scheme was stopped suddenly and where they should go for delivery? […] I told them to go to a government hospital and to get a card. This scheme has stopped and I can do nothing." (Lakshmi, CHV)

CHVs attempted to mobilise collectively to oppose the Sambhav scheme's termination and demand its reinstatement. This was best evidenced by protest activities that took place shortly after the Sambhav scheme ended. On 9th July 2013 a group of 30-40 CHVs protested against the Sambhav scheme's closure outside the offices of the programme management agency. A letter was subsequently sent to local politicians by a self-proclaimed 'union' for the CHVs, alleging that poor women were being 'abandoned' by the programme's closure. The protest was covered in local newspapers and the letters were forwarded to the Uttar Pradesh Chief Minister's office, which then

wrote to programme managers to ask them to reconsider closure of the scheme. The efforts were ultimately unsuccessful and the programme remained closed.

Some CHVs were able to adapt their brokerage services to the post-Sambhav healthcare environment by developing new relationships with private hospitals. Anita, Prisha and Jyoti continued to offer brokerage services by developing two options for families to seek care. They joined the Merrygold hospital franchise in similar commission-based roles known as 'peer educators', and also continued to accompany women to nearby former voucher facility Malhotra Hospital. Prisha explained how she offered the Merrygold hospital as a cheaper, albeit more distant, option for care: "I say to them that if you want delivery for half [price] then come to Merrygold. We call them and talk to them."

Hospital managers also took an active role in promoting continued brokerage. As noted previously, Sri Krishna Hospital hired former CHV supervisor Kabir as a 'Public Relations Officer' in order to maintain interest from nearby ex-CHVs and encourage their continued brokerage. Palash Hospital used their pre-existing 'Public Relations Officer' to contact ex-CHVs, while Malhotra Hospital utilised personal relationships with CHVs such as Anita, Prisha and Jyoti to offer increased commission payments. In this way the former CHVs could continue to earn commission payments as healthcare brokers without programmatic support from the Sambhav scheme.

Discussion

This article has set out a framework for analysing healthcare brokerage: a phenomenon in which access to healthcare is mediated by a third-party actor. Brokerage analysis offers a valuable tool for understanding how people access healthcare, and the framework in this article comprises six key areas of interest: the nature of brokerage activities; social relations that enable brokerage; benefits that different actors accrue; ways in which brokers consolidate their intermediary position; social and financial pressures that they face; and the ways in which brokers adapt to changes in the wider healthcare environment. The potential for generating insights from healthcare brokerage analysis has been illustrated here using empirical data from urban slums in Lucknow, Uttar Pradesh, where a cadre of women healthcare brokers organised travel, communicated with providers and negotiated fees on behalf of prospective healthcare users.

The findings reveal how healthcare brokerage takes place in a commercialised healthcare system characterised by pluralism of services and unpredictable costs. Healthcare brokerage activities are potentially lucrative for the brokers themselves as it allows them to collect commission payments from multiple actors: service users, providers and healthcare programmes. Brokers emphasise their personal role in facilitating access to healthcare and encourage dependency on their services, but in doing so face conflicting pressures from their family and communities and are exposed to criticism and reputational damage in the event of any problems with the care provided; the same personalised relationships that permit brokerage simultaneously encourage personal attacks. This marriage of reward and precarity is a common feature of brokerage in social systems (Stovel and Shaw, 2012), but an unexplored element of existing research on healthcare brokerage (Deepa et al., 2013; Snyder et al., 2011).

The presence of intermediating actors at the interface between communities and commercialised healthcare systems indicates a need for conceptualisations of healthcare systems to incorporate third-party actors operating with varying degrees of agency. The portrayal of healthcare systems as a marketplace of consumers and providers has become increasingly prominent in recent years (Bloom et al., 2013), yet an additional set of interests are introduced when relationships between users and providers are mediated by a third party. In this scenario, providers must consider how to attract and retain brokers as well as users, for example by using commission payments or gifts as hospitals did in Lucknow. Healthcare providers are likely to have little incentive to improve quality of care or reduce user fees if they can instead pay healthcare brokers to bring families to their facilities.

Participation in brokerage arrangements offers rewards and risks for other actors in healthcare systems. Like formalised 'gatekeeper' roles in healthcare systems (Collyer et al., 2017), brokerage appears at first glance to offer a mechanism to improve the awareness of, and access to, healthcare. However such benefits may be restricted to those who can afford to pay brokers and/or hospital fees, while the need for some hospitals to cover costs of participating in brokerage means that commissions may simply be added onto fees paid by users. As such, brokerage may exacerbate inequities in access to healthcare, and even aggravate poverty caused by catastrophic healthcare expenditures. This is a particular concern in settings like Lucknow, where users were encouraged by brokers to pay for care at private hospitals rather than receive ostensibly free care and a cash payment at government hospitals.

The empirical data used in this article were collected during three visits to Lucknow over the course of two years, thereby providing a detailed, longitudinal account of healthcare brokerage in one setting. There are other contexts in which similar commercial brokerage behaviours have been reported, notably transnational models for healthcare provision (Deepa et al., 2013; Snyder et al., 2011). The rapidly growing market of companies offering digital platforms for healthcare booking (Dubey, 2017) and 'concierge' healthcare management services (Foster, 2016) is an area in particular need of closer study.

Brokerage analysis can also be applied to the study of community-based health work. The intermediating role of community health workers is well-documented (Erasmus, 2014; Kok et al., 2017; Nading, 2013), and Standing and Chowdhury noted how, in commercialised healthcare systems, community health workers can assist healthcare users to 'negotiate pluralism and the market, to work out how to locate trusted forms of expertise' (2008, p. 2105). Some behaviours described in this article have been similarly reported in research on community health work, including the promotion of dependency and extraction of payments (Abuya et al., 2012; Coffey, 2014), and detailed study of healthcare brokerage activities in communities would be a valuable contribution to the growing body of literature on the roles and motivations of community health workers (Kok et al., 2017; Theobald et al., 2016).

Conclusions

Brokerage theories have been used widely in the study of politics and society for more than 30 years and yet remain under-utilised in the study of healthcare. In this article I have begun to address that gap by establishing a framework for healthcare brokerage analysis and applying it in the context of urban slums in Lucknow, Uttar Pradesh. The findings reveal a diverse set of activities that are

performed by brokers in Lucknow's urban slums, as they arrange healthcare and communicate and negotiate with providers on behalf of families. The findings also reveal the financial and social pressures faced by the brokers, and the strategies they employ to consolidate and adapt intermediary positions in a context of poverty and precarity.

A range of healthcare policies and interventions facilitate healthcare brokerage, particularly in commercialised healthcare systems, and the framework presented in this article provides a basis for detailed study on brokerage in different settings. In Lucknow we see how individualised results-based payments to a cadre of community-based 'volunteers' encouraged brokerage activities and undermined attainment of healthcare entitlements for people living in urban slums. Brokerage influences the pathways through which people access healthcare, potentially exacerbating healthcare expenditure and poverty in the process, and such risks need to be assessed when designing healthcare policies and interventions.

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